SEQUENCE LISTING

<110> TAKARA BIO INC.

<120> Process for the preparation of lymphocyte having cytotoxic activity

<130> 04-058-PCTJP

<150> JP 2003-298208

<151> 2003-08-22

<150> JP 2004-699

<151> 2004-01-05

<150> JP 2004-115648

<151> 2004-04-09

<150> JP 2004-222441

<151> 2004-07-29

<160> 29

<210> 1

<211> 87

<212> PRT

<213> Artificial Sequence

<220>

<223> partial region of fibronectin named || | -8

<400> 1

Pro Thr Asp Leu Arg Phe Thr Asn Ile Gly Pro Asp Thr Met Arg

1 5 10 15

Val Thr Trp Ala Pro Pro Pro Ser Ile Asp Leu Thr Asn Phe Leu

20 25 30

Val Arg Tyr Ser Pro Val Lys Asn Glu Giu Asp Val Ala Giu Leu

40 45

Ser lie Ser Pro Ser Asp Asn Ala Val Val Leu Thr Asn Leu Leu

50 55 60

Pro Gly Thr Glu Tyr Val Va! Ser Val Ser Ser Val Tyr Glu Gln

70 75

85

His Glu Ser Thr Pro Leu Arg Gly Arg Gln Lys Thr

65

. 80

<210> 2.

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> partial region of fibronectin named III-9

<400> 2

Gly Leu Asp Ser Pro Thr Gly Ile Asp Phe Ser Asp Ile Thr Ala 5 10 Asn Ser Phe Thr Val His Trp IIe Ala Pro Arg Ala Thr IIe Thr Gly Tyr Arg Ile Arg His His Pro Glu His Phe Ser Gly Arg Pro 35 Arg Glu Asp Arg Val Pro His Ser Arg Asn Ser Ile Thr Leu Thr 50 55 60 Asn Leu Thr Pro Gly Thr Glu Tyr Val Val Ser lle Val Ala Leu 65 · 70 Asn Gly Arg Glu Glu Ser Pro Leu Leu lle Gly Gln Gln Ser Thr 80 85 90

<210> 3

<211> 94

<212> PRT

<213> Artificial Sequence

<220>

<223> partial region of fibronectin named III-10

<400> 3

Val Ser Asp Val Pro Arg Asp Leu Glu Val Val Ala Ala Thr Pro

WO 2005/019450

PCT/JP2004/012238

10 15 Thr Ser Leu Leu lle Ser Trp Asp Ala Pro Ala Val Thr Val Arg 20 25 Tyr Tyr Arg lie Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val 35 40 Gin Glu Phe Thr Val Pro Gly Ser Lys Ser Thr Ala Thr lie Ser -50 55 Gly Leu Lys Pro Gly Val Asp Tyr Thr lie Thr Val Tyr Ala Val 65 70 Thr Gly Arg Gly Asp Ser Pro Ala Ser Ser Lys Pro ile Ser Ile 85 Asn Tyr Arg Thr

<210> 4

<211> 84

<212> PRT

<213> Artificial Sequence

<220>

<223> partial region of fibronectin named | | | -11

<400> 4

Gin Met Gin Val Thr Asp. Val Gin Asp Asn Ser He Ser Val Lys

1 5 10 15

Trp Leu Pro Ser Ser Ser Pro Val Thr Gly Tyr Arg Val Thr Thr

<210> 5

<211> 92

<212> PRT

<213> Artificial Sequence

80

<220>

<223> partial region of fibronectin named III-12

<400> 5

 Ala IIe Pro Ala Pro Thr Asp Leu Lys Phe Thr Gin Val Thr Pro

 1
 5
 10
 15

 Thr Ser Leu Ser Ala Gin Trp Thr Pro Pro Asn Val Gin Leu Thr
 20
 25
 30

 Gly Tyr Arg Val Arg Val Thr Pro Lys Giu Lys Thr Gly Pro Met
 35
 40
 45

WO 2005/019450

PCT/JP2004/012238

 Lys Giu ile Asn Leu Ala Pro Asp Ser Ser Ser Val Val Val Ser

 50
 55
 60

 Gly Leu Met Val Ala Thr Lys Tyr Glu Val Ser Val Tyr Ala Leu
 65
 70
 75

 Lys Asp Thr Leu Thr Ser Arg Pro Ala Gln Gly Val Val Thr Thr
 80
 85
 90

Leu Glu

<210> 6

<211> 89

<212> PRT

<213> Artificial Sequence

<220> ·

<223> partial region of fibronectin named III-13

<400> 6

 Asn Val Ser Pro Pro Arg Arg Ala Arg Val Thr Asp Ala Thr Glu

 1
 5
 10
 15

 Thr Thr lie Thr lie Ser Trp Arg Thr Lys Thr Glu Thr lie Thr 20
 25
 30

 Gly Phe Gln Val Asp Ala Val Pro Ala Asn Gly Gln Thr Pro lie 35
 40
 45

 Gln Arg Thr lie Lys Pro Asp Val Arg Ser Tyr Thr lie Thr Gly 50
 55
 60

Leu Gin Pro Giy Thr Asp Tyr Lys lie Tyr Leu Tyr Thr Leu Asn
65 70 75

Asp Asn Ala Arg Ser Ser Pro Val Val lie Asp Ala Ser Thr
80 85

⟨210⟩ 7

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> partial region of fibronectin named | | 1-14

<400> 7·

Ala ile Asp Ala Pro Ser Asn Leu Arg Phe Leu Ala Thr Thr Pro 1 5 10 15 Asn Ser Leu Leu Val Ser Trp Gin Pro Pro Arg Ala Arg ile Thr 20 25 30 Gly Tyr Ile lie Lys Tyr Glu Lys Pro Gly Ser Pro Pro Arg Glu 35 45 Val Val Pro Arg Pro Arg Pro Gly Val Thr Glu Ala Thr lie Thr 50 55 Gly Leu Glu Pro Gly Thr Glu Tyr Thr. He Tyr Val He Ala Leu 65 70

Lys Asn Asn Gin Lys Ser Giu Pro Leu ile Giy Arg Lys Lys Thr

7 / 4 6

WO 2005/019450

PCT/JP2004/012238

80

85

90

⟨210⟩ 8

<211> 25

<212> PRT

<213> Artificial Sequence

⟨220⟩

<223> partial region of fibronectin named CS-1

<400> 8

Asp Glu Leu Pro Gln Leu Val Thr Leu Pro His Pro Asn Leu His

10

15

Gly Pro Glu lle Leu Asp Val Pro Ser Thr

20

25

<210> 9

<211> 274

<212> PRT

<213> Human

<220>

<223> fibronectin fragment named C-274

<400> 9

Pro	Thr	Asp	Leu	Arg	Phe	Thr	Asn	He	Gly	Pro	Asp	Thr	Met	Arg
1				5			•		10					15
Val	Thr	Trp	Ala	Pro	Pro	Pro	Ser	l l e	Asp	Leu	Thr	Asn	Phe	Leu
				20					25					30
Val	Arg	Tyr	Ser	Pro	Val	Lys	Asn	Glu	Glu	Asp	Val	Ala	Glu	Leu
				35					40					45
Ser	Нe	Ser	Pro	Ser	Asp	Asn	Ala	Vai	Val	Leu	Thr	Asn	Leu	Leu
				50					55					60
Pro	Gly	Thr	Głu	Tyr	Val	Val	Ser	Val	Ser	Ser.	Val	Tyr	Glu	GIn
				65		-			70					75
His	Glu	Ser	Thr	Pro	Leu	Arg	Gly	Arg	GIn	Lys	Thr	Gly	Leu	Asp
				80					85					90
Ser	Pro	Thr	Gly	lle	Asp	Phe	Ser	Asp	l l e	Thr	Ala	Asn	Ser	Phe
	-			95					100					105
Thr	Val	His	Trp	lle	Ala	Pro	Arg	Ala	Thr	He	Thr	Gly	Tyr	Arg
				110					115					120
He	Arg	His	His	Pro	Glu	His	Phe	Ser	Gly	Arg	Pro	Arg	Glu	Asp
				125					130					135
Arg	Vai	Pro	His	Ser	Arg	Asn	Ser	He	Thr	Leu	Thr	Asn	Leu	Thr
				140				•	145					150
Pro	Gly	Thr	Glu	Tyr	Val	Val	Ser	lle	Val	Ala	Leu	Asn	Gly	Arg
				155					160					165
Glu	Glu	Ser	Pro	Leu	Leu	l l e	Gly	G I n	Gln	Ser	Thr	Val	Ser	Asp
				170					175					180
	0.50	A = =	A = ==	1	C1.:	W = 1	W - F			T L	D	TL	0	

185 190 195 Leu lie Ser Trp Asp Ala Pro Ala Val Thr Val Arg Tyr Tyr Arg 200 205 lle Thr Tyr Gly Glu Thr Gly Gly Asn Ser Pro Val Gln Glu Phe 215 220 Thr Val Pro Gly Ser Lys Ser Thr Ala Thr Ile Ser Gly Leu Lys 230 235 Pro Gly Val Asp Tyr Thr lie Thr Val Tyr Ala Val Thr Gly Arg 250 245 Gly Asp Ser Pro Ala Ser Ser Lys Pro lle Ser Ile Asn Tyr Arg 265 Thr Glu lle Asp

<210> 10

<211> 271

<212> PRT

<213> Human

(220>

<223> fibronectin fragment named H-271

<400> 10

Ala ile Pro Ala Pro Thr Asp Leu Lys Phe Thr Gin Val Thr Pro

1 5 10 15

Thr Ser Leu Ser Ala Gin Trp Thr Pro Pro Asn Val Gin Leu Thr

				20					25			٠		30
Gly	Tyr	Arg	V a I	Arg	Val	Thr	Pro	Lys	Glu	Lys	Thr	Gly	Pro	Met
				35					40					45
Lys	Glu	He	Asn	Leu	Ala	Pro	Asp	Ser	Ser	Ser	Val	Val	Val	Ser
				50					55					60
Gly	Leu	Met	Val	Ala	Thr	Lys	Tyr	Glu	Val	Ser	Val	Tyr	Ala	Leu
				. 65					70					75
Lys	Asp	Thr	Leu	Thr	Ser	Arg	Pro	Ala	GIn	Gly	Val	Val	Thr	Thr
				80			-		85					90
Leu	Glu	Asn	Val	Ser	Pro	Pro	Arg	Arg	Ala	Arg	Val	Thr	Asp	Ala
				95					100	•				105
Thr	Glu	Thr	Thr	lle	Thr	ile	Ser	Trp	Arg	Thr	Lys	Thr	Glu	Thr
				110					115					120
lle	Thr	Gly	Phe	Gln	Val	Asp	Ala	Val	Pro	Ala	Asn	Giy	Gin	Thr
				125					130					135
Pro	lle	GIn	Arg	Thr	I I e	Lys	Pro	Asp	Vai	Arg	Ser	Tyr	Thr	lle
				140					145					150
Thr	Gly	Leu	Gln	Pro	Gly	Thr	Asp	Tyr	Lys	He	Tyr	Leu	Tyr	Thr
				155					160					165
Leu	Asn	Asp	Asn	Ala	Arg	Ser	Ser	Pro	Val	Val	He	Asp	Ala	Ser
				170					175					180
Thr	Ala	ile	Asp	Ala	Pro	Ser	Asn	Leu		Phe	Leu	Ala	Thr	Thr
				185					190					195
Pro	Asn	Ser	Leu		Val	Ser	Trp	GIn		Pro	Arg	Ala	Arg	
				200					205					210
Thr	GIV	Tyr	lle	He	Lvs	Tyr	Glu	Lys	Pro	Gly	Ser	Pro	Pro	Arg

215 220 225

Glu Val Val Pro Arg Pro Arg Pro Gly Val Thr Glu Ala Thr Ile
230 235 240

Thr Gly Leu Glu Pro Gly Thr Glu Tyr Thr Ile Tyr Val Ile Ala
245 250 255

Leu Lys Asn Asn Gin Lys Ser Giu Pro Leu IIe Giy Arg Lys Lys

260 265 270

Thr

<210> 11

<211> 296

<212> PRT

<213> Artificial Sequence

(220)

<223> fibronectin fragment named H-296

<400> 1-1

Ala lle Pro Ala Pro Thr Asp Leu-Lys Phe Thr Gln Val Thr Pro

1 5 10 15

Thr Ser Leu Ser Ala Gin Trp Thr Pro Pro Asn Val Gin Leu Thr

20 25 30

Gly Tyr Arg Val Arg Val Thr Pro Lys Glu Lys Thr Gly Pro Met

35 40 45

Lys Glu lle Asn Leu Ala Pro Asp Ser Ser Ser Val Val Ser

				50					55					60
Gly	Leu	Met	Val	Ala	Thr	Lys	Tyr	Glu	V a I	Ser	Val	Tyr	Ala	Leu
			٠	65					70					75
Lys	Asp	Thr	Leu	Thr	Ser	Arg	Pro	Ala	Gln	Gly	Val	Val	Thr	Thr
				80					85					90
Ļeu	Glu	Asn	Val	Ser	Pro	Pro	Arg	Arg	Ala	Arg	Val	Thr	Asp	Ala
				95					100					105
Thr	Glu	Thr	Thr	He	Thr	Пe	Ser	Trp	Arg	Thr	Lys	Thr	Glu	Thr
		-		110					115					120
lle	Thr	Gly	Phe	GIn	Val	Asp	Ala	Val	Pro	Ala	Asn	Gly	GIn	Thr
				125					130					135
Pro	ile	Gln	Arg	Thr	lle	Lys	Pro	Asp	Val	Arg	Ser	Tyr	Thr	He
				140					145					150
Thr	Gly	Leu	Gln	Pro	Gly	Thr	Asp	Tyr	Lys	He	Tyr	Leu	Tyr	Thr
				155					160					165
Leu	Asn	Asp	Asn	Ala	Arg	Ser	Ser	Pro	Val	Val	lle	Asp	Ala	Ser
				170			-		175					180
Thr	Ala	He	Asp	Ala	Pro	Ser	Asn	Leu	Arg	Phe	Leu	Ala	Thr	Thr
				185					190					195
Pro	Asn	Ser	Leu		Val	Ser	Trp	GIn	Pro	Pro	Arg	Ala	Arg	lle
	-			200				•	205					210
Thr	Gly	Tyr	lle	lle	Lys	Tyr	Glu	Lys	Pro	Gly	Ser	Pro	Pro	Arg
				215					220					225
Glu	Val	Val	Pro		Pro	Arg	Pro	Gly		Thr	Glu	Ala	Thr	
				230					235					240
Thr	Gly	Leu	Glu	Pro	GIV	Thr	Glu	Tyr	Thr	Пe	Tyr	Val	lle	Ala

245 250 255

Leu Lys Asn Asn Gln Lys Ser Glu Pro Leu IIe Gly Arg Lys Lys
260 265 270

Thr Asp Glu Leu Pro Gln Leu Val Thr Leu Pro His Pro Asn Leu
275 280 285

His Gly Pro Glu IIe Leu Asp Val Pro Ser Thr
290 295

<210> 12

<211> 549

<212> PRT

<213> Artificial Sequence

<220> ·

<223> fibronectin fragment named CH-271

50

<400> 12

 Pro
 Thr
 Asp
 Leu
 Arg
 Phe
 Thr
 Asn
 I le
 Gly
 Pro
 Asp
 Thr
 Met
 Arg

 1
 5
 5
 10
 10
 10
 15
 15

 Val
 Thr
 Arg
 Pro
 Pro
 Pro
 Ser
 I le
 Asp
 Leu
 Thr
 Asn
 Phe
 Leu

 Val
 Arg
 Tyr
 Ser
 Pro
 Val
 Lys
 Asn
 Glu
 Glu
 Asp
 Val
 Aia
 Glu
 Leu

 Ser
 I le
 Ser
 Pro
 Ser
 Asn
 Ala
 Val
 Leu
 Thr
 Asn
 Leu
 Leu

60

5 5

Pro	Gly	Thr	Glu	Tyr	Val	Val	Ser	Val	Ser	Ser	Val	Tyr	Glu	GIn
				65					70					75
His	Glu	Ser	Thr	Pro	Leu	Arg	Gly	Arg	Gln	Lys	Thr	Gly	Leu	Asp
				80					85					90
Ser	Pro	Thr	Gly	He	Asp	Phe	Ser	Asp	Нe	Thr	Ala	Asn	Ser	Phe
				95					100					105
Thr	V a 1	His	Trp	l I e	Ala	Pro	Arg	Ala	Thr	Пe	Thr	Gly	Tyr	Arg
	•			110					115					120
lle	Arg	His	His	Pro	Glu	His	Phe	Ser	Gly	Arg	Pro	Arg	Glu	Asp
				125					130					135
Arg	Val	Pro	His	Ser	Arg	Asn	Ser	IIe.	Thr	Leu	Thr	Asn	Leu	Thr
				140					145					150
Pro	Gly	Thr	Glu	Tyr	Val	Val	Ser	He	Val	Ala	Leu	Asn	Giy	Arg
				155					160					165
Glu	G I ư	Ser	Pro	Leu	Leu	He	Gly	GIn	GIn	Ser	Thr	Val	Ser	Asp
				170					175					180
Val	Pro	Arg	Asp	Leu	Glu	Vai	Val	Ala	Ala	Thr	Pro	Thr	Ser	Leu
				185					190					195
Leu	lle	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	Val	Arg	Tyr	Tyr	Arg
				200					205					210
He	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gin	Glu	Phe
				215					220					225
Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	He	Ser	Gly	Leu	Lys
				230					235					240
Pro	Gly	Val	Asp	Tyr	Thr	lle	Thr	Val		Ala	Val	Thr	Gly	Arg
				245					250					255

Gly	Asp	Ser	Pro	Ala	Ser	Ser	Lys	Pro	1 l e	Ser	lle	Asn	Tyr	Arg
				260					265					270
Thr	Glu	lle	Asp	Lys	Pro	Ser	Met	Ala	lle	Pro	Ala	Pro	Thr	Asp
				275					280					285
Leu	Lys	Phe	Thr	GIn	Val	Thr	Pro	Thr	Ser	Leu	Ser	Ala	Gln	Trp
		-		290					295					300
Thr	Pro	Pro	Asn	Val	Gln	Leu	Thr	GIy.	Tyr	Arg	Val	Arg	Val	Thr
				305					310					315
Pro	Lys	Glu	Lys	Thr	GÍÝ	Pro	Met	Lys	Glu	lle	Asn	Leu	Ala	Pro
				320					325					330
Asp	Ser	Ser	Ser	Val	Val	·Val	Ser	Gly	Leu	Met	Val	Ala	Thr	. Lys
				335					340					345
Tyr	Glu	Val	Ser	Vai	Tyr	Ala	Leu	Lys	Asp	Thr	Leu	Thr	Ser	Arg
				350					355					360
Pro	Ala	Gin	Gly		Val	Thr	Thr	Leu	Glu	Asn	Val	Ser	Pro	Pro
				365					370					375
Arg	Arg	Ala	Arg		Thr	Asp	Ala	Thr		Thr	Thr	lle	Thr	lie
				380					385					390
Ser	Trp	Arg	Thr		Thr	Glu	Thr	He		Gly	Phe	Gln	Val	
				395					400					405
Ala	Val	Pro	Ala		Gly	Gln	Thr	Pro		Gln	Arg	Thr	lle	
				410				•	415					420
Pro	Asp	Val	Arg			Thr	ile			Leu	GIn	Pro	Gly	
				425		_			430					435
Asp	Tyr	Lys	lie			Tyr	Thr	Leu			Asn	Ala	Arg	
				440					445					450

 Ser
 Pro
 Val
 Val
 11e
 Asp
 Ala
 Ser
 Thr
 Ala
 11e
 Asp
 Ala
 Pro
 Ser
 465
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<210> 13

<211> 574

<212> PRT

<213> Artificial Sequence

<220>

<223> fibronectin fragment named CH-296

<400> 13

Pro Thr Asp Leu Arg Phe Thr Asn Ile Gly Pro Asp Thr Met Arg

15					10					5				1
Leu	Phe	Asn	Thr	Leu	Asp	lle	Ser	Pro	Pro	Pro	Ala	Trp	Thr	Val
30					25		٠			20				
Leu	Glu	Ala	Val	Asp	Glu	Glu	Asn	Lys	Val	Pro	Ser	Tyr	Arg	Val
45					40					35				
Leu	Leu	Asn	Thr	Leu	Val	Val	Ala	Asn	Asp	Ser	Pro	Ser	lle	Ser
60					55	-				50				
GIn	Glu	Tyr	Val	Ser	Ser	Val	Ser	Val	Val	Tyr	Glu	Thr	Gly	Pro
75					70					65				
Asp	Leu	Gly	Thr	Lys	GIn	Arg	Gly	Arg	Leu	Pro	Thr	Ser	Glu	His
90					85					80				,
Phe	Ser	Asn	Ala	Thr	lle	Asp	Ser	Phe	Asp	lle	Gly	Thr	Pro	Ser
105					100					95				
Arg	Tyr	Gly	Thr	ile	Thr	Ala	Arg	Pro	Ala	lle	Trp	His	Val	Thr
120					115					110			-	
	Glu	Arg	Pro	Arg	Gly	Ser	Phe	His	Glu		His	His	Arg	He
135					130					125				
Thr	Leu	Asn	Thr	Leu	Thr	He	Ser	Asn	Arg		His	Pro	Val	Arg
150					145					140				
	Gly	Asn	Leu	Ala		lie	Ser	V a _. I	Val		Glu	Thr	Gly	Pro
165					160					155				
	Ser	Val	Thr	Ser		Gin	Gly	lle	Leu		Pro	Ser	Glu	Glu
180	_		_		175					170				
	Ser	Thr	Pro	Thr		Ala	Vai	Val	Glu		Asp	Arg	Pro	Val
195	_	_			190					185	_	_		
Arg	Tvr	Tvr	Aro	Val	Thr	Val	Ala	Pro	Ala	Asn	Tro	Ser	מוו	Leu

				200					205					210
lle	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
				215	•		•		220					225
Thr	V a I	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thir	11e	Ser	Gly	Leu	Lys
				230					235					240
Pro	Gly	V a I	Asp	Tyr	Thr	lle	Thr	Val	Tyr	Αla	Val	Thr	Gly	Arg
				245				•	250				·	255
GI y	Asp	Ser	Pro	Ala	Ser	Ser	Lys	Pro	lle	Ser	IІе	Asn	Tyr	Arg
				260					265					270
Thr	Głu	He	Asp	Lys	Pro	Ser	Met	Ala	1 l e	Pro	Ala	Pro	Thr	Asp
				275					280					285
Leu	Lys	Phe	Thr	Gln	Val	Thr	Pro	Thr	Ser	Leu	Ser	Ala	GIn	Trp
				290					295					300
Thr	Pro	Pro	Asn	Va!	Gln	Leu	Thr	Gly	Tyr	Arg	Val	Arg	Val	Thr
				305					310					315
Pro	Lys	Glu	Lys	Thr	Gly	Pro	Met	Lys	Glu	He	Asn	Leu	Ala	Pro
				320					325					330
Asp	Ser	Ser	Ser		Val	Val	Ser	Gly	Leu	Met	Val	Ala	Thr	Lys
				335					340					345
Tyŕ	Glu	Val	Ser		Tyr	Ala	Leu	Lys		Thr	Leu	Thr	Ser	
				350					355					360
Pro	Ala	Gln	Gly		Val	Thr	Thr	Leu		Asn	Val	Ser	Pro	
				365					370					375
Arg	Arg	Ala	Arg		Thr	Asp	Ala	Thṛ		Thr	Thr	lle	Thr	
				380		_			385					390
Car	Trn	Arg	Thr	lvs	Thr	Glu	Thr	l l e	Thr	GIV	Phe	Gin	Val	Asp

				395					400					405
Ala	Val	Pro	Ala	Asn	Gly	GIn	Thr	Pro	lle	Gin	Arg	Thr	ile	Lys
				410					415					420
Pro	Asp	Val	Arg	Ser	Tyr	Thr	lle	Thr	Gly	Leu	GIn	Pro	Gly	Thr
				425					430					435
Asp	Tyr	Lys	lle	Tyr	Leu	Tyr	Thr	Leu	Asn	Asp	Asn	Ala	Arg	Ser
			-	440					445					450
Ser	Pro	Val	Val	lle	Asp	Ala	Ser	Thr	Ala	IІе	Asp	Ala	Pro	Ser
				455					460					465
Asn	Leu	Arg	Phe	Leu	Ala	Thr	Thr	Pro	Аѕп	Ser	Leu	Leu	Val	Ser
				470			v.		475					480
Trp	Gln	Pro	Pro	Arg	Ala	Arg	He	Thr	Gly	Tyr	l I e	lle	Lys	Tyr
				485					490					495
Glu	Lys	Pro	Gly	Ser	Pro	Pro	Arg	Glu	Val	Val	Pro	Arg	Pro	Arg
				500					505					510
Pro	Gly	Val	Thr	Glu	Ala	Thr	ile	Thr	Gly	Leu	Glu	Pro	Gly	Thr
				515					520					525
Glju	Tyr	Thr	He	Tyr	Val	11e	Ala	Leu	Lys	Asn	Asn	Gln	Lys	Ser
				530					535					540
Glu	Pro	Leu	He	Gly	Arg	Lys	Lys	Thr	Asp	Glu	Leu	Pro	Gln	Leu
				545					550					555
Val	Thr	Leu	Pro	His	Pro	Asn	Leu	His	Gly	Pro	GΙυ	He	Leu	Asp
				560					565					570
Val	Pro	Ser	Thr											

<210> 14

<211> 302

<212> PRT

<213> Artificial Sequence

<220>

<223> fibronectin fragment named C-CS1

110

<400> 14

Pro Thr Asp Leu Arg Phe Thr Asn Ile Gly Pro Asp Thr Met Arg 10 Val Thr Trp Ala Pro Pro Pro Ser IIe Asp Leu Thr Asn Phe Leu Vai Arg Tyr Ser Pro Vai Lys Asn Glu Glu Asp Val Ala Glu Leu 35 40 Ser lie Ser Pro Ser Asp Asn Ala Val Leu Thr Asn Leu Leu 50 55 Pro Gly Thr Glu Tyr Val Val Ser Val Ser Ser Val Tyr Glu Gln His Glu Ser Thr Pro Leu Arg Gly Arg Gln Lys Thr Gly Leu Asp 80 85 Ser Pro Thr Gly Ile Asp Phe Ser Asp Ile Thr Ala Asn Ser Phe 95 100 Thr Val His Trp lie Ala Pro Arg Ala Thr lie Thr Gly Tyr Arg

lle Arg His His Pro Glu His Phe Ser Gly Arg Pro Arg Glu Asp

115

				125					130					135
Arg	Val	Pro	His	Ser	Arg	Asn	Ser	lle	Thr	Leu	Thr	Asn	Leu	Thr
				140					145		-			150
Pro	Gly	Thr	Glu	Tyr	Val	Val	Ser	l I e	Val	Ala	Leu	Asn	Gly	Arg
•				155					160					165
Glu	Glu	Ser	Pro	Leu	Leu	lle	Gly	Gln	Gln	Ser	Thr	Val	Ser	Asp
				170					175					180
Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr	Ser	Leu
				185					190					195
Leu	I I e	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	Val	Arg	T-y r	Tyr	Arg
				200					205		•			210
He	Thr	Tyr	Gly	Glu	Ťhr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
				215					220					225
Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	lle	Ser	Gly	Leu	Lys
				230					235					240
Pro	Gly	Val	Asp	Tyr	Thr	lle	Thr	Val	Tyr	Ala	Val	Thr	Giy	Arg
				245	٠				250	*				255
Gly	Asp	Ser	Pro	Ala	Ser	Ser	Lys	Pro	lle	Ser	11e	Asn	Tyr	Arg
				260					265					270
Thr	Glu	11e	Asp	Lys	Pro	Ser	Asp	Glu	Leu	Pró	Gin	Leu	Val	Thr
				275					280					285
Leu	Pro	His	Pro	Asn	Leu	His	Gly	Pro	Glu	1,1 e	Leu	Asp	Val	Pro
				290					295					300

Ser Thr

2 2/4 6

<210> 15

<211> 367

<212> PRT

<213> Artificial Sequence

(220)

<223> fibronectin fragment named CHV-89

⟨400⟩ 15

Pro Thr Asp Leu Arg Phe Thr Asn lie Gly Pro Asp Thr Met Arg

1 5 10 15

Val Thr Trp Ala Pro Pro Pro Ser Ile Asp Leu Thr Asn Phe Leu
20 25 30

Val Arg Tyr Ser Pro Val Lys Asn Glu Glu Asp Val Ala Glu Leu

35 40 45

Ser lie Ser Pro Ser Asp Asn Ala Val Val Leu Thr Asn Leu Leu
50 55 60

Pro Gly Thr Glu Tyr Val Val Ser Val Ser Ser Val Tyr Glu Gin

65 70 75

His Glu Ser Thr Pro Leu Arg Gly Arg Gln Lys Thr Gly Leu Asp

80 85 90

Ser Pro Thr Gly lie Asp Phe Ser Asp lie Thr Ala Asn Ser Phe

5 100 105

Thr Val His Trp lle Ala Pro Arg Ala Thr lle Thr Gly Tyr Arg

110 115 120

lle Arg His His Pro Glu His Phe Ser Gly Arg Pro Arg Glu Asp

				125					130					135
Arg	Val	Pro	His	Ser	Arg	Asn	Ser	lle	Thr	Leu	Thr	Asn	Leu	Thr
٠		·		140		-			145					150
Pro	Gly	Thr	Glu	Tyr	Val	Val	Ser	I I e	Vai	Ala	Leu	Asn	Gly	Arg
				155					160					165
Glu	Glu	Ser	Pro	Leu	Leu	He	Gly	Gln	Gin	Ser	Thr	Val	Ser	Asp
				170					175					180
Val	Pro	Arg	Asp	Leu	Glu	V al	Val	Ala	Ala	Thr	Pro	Thr	Ser	Leu
				185					190					195
Leu	I I e	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	Val	Arg	Tyr	Tyr	Arg
				200					205					210
lle	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	GIn	Glu	Phe
				215					220					225
Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	I I e	Ser	Gly	Leu	Lys
				230					235					240
Pro	Glý	Val	Asp	Tyr	Thr	He	Thr	Val	Tyr	Ála	Val	Thr	Gly	Arg
				245					250					255
Gly	Asp	Ser	Pro	Ala	Ser	Ser	Lys	Pro	He	Ser	He	Asn	Tyr	Arg
				260					265					270
Thr	Glu	He	Asp	Lys	Pro	Ser	Met	Asn	Val	Ser	Pro	Pro	Arg	Arg
				275					280					285
Ala	Arg	Val	Thr		Ala	Thr	Glu	Thr	Thr	Пe	Thr	He	Ser	Trp
				290					295					300
Arg	Thr	Lys	Thr		Thr	He	Thr	GIy.		Gln	Val	Asp	Ala	Val
				305					310					315
Pro	Ala	Asn	Gly	Gln	Thr	Pro	lie	Gln	Arg	Thr	He	Lys	Pro	Asp

WO 2005/019450

PCT/JP2004/012238

 Val
 Arg
 Ser
 Tyr
 Thr
 IIe
 Thr
 Gly
 Leu
 Gln
 Pro
 Gly
 Thr
 Asp
 Tyr

 Lys
 Iie
 Tyr
 Leu
 Tyr
 Thr
 Leu
 Asn
 Asn
 Ala
 Arg
 Ser
 Ser
 Pro

 Val
 Val
 Iie
 Asp
 Ala
 Ser
 Thr

 365
 365
 325
 325
 360

(210) 16

⟨21,1⟩ 368

<212> PRT

<213> Artificial Sequence

<220>

<223> fibronectin fragment named CHV-90

<400> 16

 Pro
 Thr
 Asp
 Leu
 Arg
 Phe
 Thr
 Asn
 lie
 Gly
 Pro
 Asp
 Thr
 Met
 Arg

 1
 5
 10
 15

 Val
 1r
 Trp
 Ala
 Pro
 Pro
 Pro
 Ser
 lie
 Asp
 Leu
 Thr
 Asn
 Phe
 Leu
 Thr
 Asn
 Phe
 Leu
 Thr
 Asn
 Phe
 Leu
 Thr
 Asn
 Ala
 Glu
 Glu
 Asp
 Val
 Ala
 Glu
 Leu
 Thr
 Asn
 Leu
 Thr
 Asn
 Leu
 <

Pro	Gly	Thr	Glu	Tyr	Vai	V al	Ser	Val	Ser	Ser	Val	Tyr	Glu	Gln
				65					70					75
His	Glu	Ser	Thr	Pro	Leu	Arg	Gly	Arg	Gin	Lys	Thr	Gly	Leu	Asp
				80					85		•			90
Ser	Pro	Thr	Gly	lle	Asp	Phe	Ser	Asp	He	Thr	Ala	Asn	Ser	Phe
	-			95					100					105
Thr	Va I	His	Trp	l i e	Ala	Pro	Arg	Ala	Thr	lle	Thr	Gly	Tyr	Arg
				110					115					120
lle	Arg	His	His	Pro	Glu	His	Phe	Ser	Gly	Arg	Pro	Arg	Glu	Asp
				125					130					135
Arg	Val	Pro	His	Ser	Arg	Asn	Ser	lle	Thr	Leu	Thr	Asn	Leu	Thr
			•	140					145					150
Pro	Gly	Thr	Glu	Tyr	Val	Val	Ser	. I le	Val	Ala	Leu	Asn	Gly	Arg
				155				•	160	,			•	165
Glu	GI ú	Ser	Pro	Leu	Leu	lle	Gly	Gln	Gin	Ser	Thr	Val	Ser	Asp
				170					175					180
Val	Pro	Arg	Asp		Glu	Val	Val	Ala		Thr	Pro	Thr	Ser	
				185					190					195
Leu	lle	Ser	Trp		Ala	Pro	Ala	Val		Val	Arg	Tyr	Tyr	
				200			•		205					210
lle	Thr	Tyr	Gly		Thr	Gly	Gly	Asn		Pro	Vai	Gin	Glu	
				215					220					225
Thr	Val	Pro	Gly		Lys	Ser	Thr			lie	Ser	Gly	Leu	Lys
			_	230					235					240
Pro	Gly	Val	Asp			1 l e	Thr				Val	Thr	Gly	
				245					250					255

Gly Asp Ser Pro Ala Ser Ser Lys Pro lie Ser lle Asn Tyr Arg 260 265 Thr Glu lie Asp Lys Pro Ser Met Ala IIe Asp Ala Pro Ser Asn 275 280 Leu Arg Phe Leu Ala Thr Thr Pro Asn Ser Leu Leu Val Ser Trp 290 295 Gin Pro Pro Arg Ala Arg lie Thr Gly Tyr lie lie Lys Tyr Glu 305 310 Lys Pro Gly Ser Pro Pro Arg Glu Val Val Pro Arg Pro Arg Pro 320 325 Gly Val Thr Glu Ala Thr lle Thr Gly Leu Glu Pro Gly Thr Glu 335 340 Tyr Thr lie Tyr Val lie Ala Leu Lys Asn Asn Gin Lys Ser Glu 350 355 360 Pro Leu lle Gly Arg Lys Lys Thr 365

<210> 17

<211> 370

<212> PRT

<213> Artificial Sequence

<220>

<223> fibronectin fragment named CHV-92

<400> 17

Pro	Thr	Asp	Leu	Arg	Phe	Thr	Asn	He	Gly	Pro	Asp	Thr	Met	Arg
1				5					10					15
Val	Thr	Trp	Ala	Pro	Pro	Pro	Ser	1 I e	Asp	Leu	Thr	Asn	Phe	Leu
				20					25					30
Val	Arg	Tyr	Ser	Pro	V a I	Lys	Asn	Glu	Glu	Asp	Val	Ala	Glu	Leu
				35				-	40					45
Ser	Пe	Ser	Pro	Ser	Asp	Asn	Ala	Val	Val	Leu	Thr	Asn	Leu	Leu
	-			50					55					60
Pro	Gly	Thr	Glu	Tyr	Val	Va I.	Ser	Val	Ser	Ser	Val	Tyr	Glu	Gln
				65	-				70					75
His	Glu	Ser	Thr	Pro	Leu	Arg	Gly	Arg	Gln	Lys	Thr	Gly	Leu	Asp
				80					85					90
Ser	Pro	Thr	Gly	He	Asp	Phe	Ser	Asp	He	Thr	Ala	Asn	Ser	Phe
				95					100					105
Thr	Val	His	Trp	He	Ala	Pro	Arg	Ala	Thr	lle	Thr	Gly	Tyr	Arg
				110					115					120
lle	Arg	His	His	Pro	Glu	His	Phe	Ser	Gly	Arg	Pro	Arg	Glu	Asp
				125					130					135
Arg	V a I	Pro	His	Ser	Arg	Asn	Ser	lle	Thr	Leu	Thr	Asn	Leu	Thr
				140					145					150
Pro	Gly	Thr	Glu	Tyr	Val	V a I	Ser	l l e	Val	Ala	Leu	Asn	Gly	Arg
				155					160					165
Glu	Glu	Ser	Pro	Leu	Leu	lle	Gly	Gin	Gln	Ser	Thr	Val	Ser	Asp
				170					175					180
Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr	Ser	Leu

				185					190					195
Leu	lle	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	Val	Arg	Tyr	Tyr	Arg
		-		200					205					210
He	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gin	Glu	Phe
				215					220					225
Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	l l e	Ser	Gly	Leu	Lys
				230		•	•		235					240
Pro	Gly	Val	Asp	Tyr	Thr	lle	Thr	Val	Tyr	Ala	Val	Thr	Gly	Arg
(245					250		•			255
GÌy	Asp	Ser	Pro	Ala	Ser	Ser	Lys	Pro	lle	Ser	l I e	Asn	Tyr	Arg
				260					265					270
Thr	Glu	lie	Asp	Lys	Pro	Ser	Met	Ala	He	Pro	Ala	Pro	Thr	Asp
				275					280					285
Leu	Lys	Phe	Thr	Gln	Vai	Thr	Pro	Thr	Ser	Leu	Ser	Ala	GIn	Trp
				290					295					300
Thr	Pro	Pro	Asn	V a I	Gln	Leu	Thr	Gly	Tyr	Arg	Va I	Arg	Val	Thr
				305		•			310		•			315
Pro	Lys	Glu	Lys	Thr	Gly	Pro	Met	Lys	Glu	I I e	Asn	Leu	Ala	Pro
				320					325					330
Asp	Ser	Ser	Ser	Val	Val	Val	Ser	Gly	Leu	Met	Val	Ala	Thr	Lys
				335					340					345
Tyr	Glu	Val	Ser	Val	Tyr	Ala	Leu	Lys	Asp	Thr	Leu	Thr	Ser	Arg
				350					3,55					360
Pro	Ala	Gln	Gly		Val	Thr	Thr	Leu	Glu					
				365					370					

<210> 18

<211> 457

<212> PRT

<213> Artificial Sequence

<220>

<223> fibronectin fragment named CHV-179

<400> 18

Pro Thr Asp Leu Arg Phe Thr Asn I le Gly Pro Asp Thr Met Arg

1 5. 10 15

Val Thr Trp Ala Pro Pro Pro Ser I le Asp Leu Thr Asn Phe Leu

20 25 30

Val Arg Tyr Ser Pro Val Lys Asn Glu Glu Asp Val Ala Glu Leu

35 40 45

Ser lie Ser Pro Ser Asp Asn Ala Val Val Leu Thr Asn Leu Leu

50 55 60

Pro Gly Thr Glu Tyr Val Val Ser Val Ser Ser Val Tyr Glu Gln
65 70 75

His Glu Ser Thr Pro Leu Arg Gly Arg Gln Lys Thr Gly Leu Asp

80 85 90

Ser Pro Thr Gly Ile Asp Phe Ser Asp Ile Thr Ala Asn Ser Phe

100 105

Thr Val His Trp IIe Ala Pro Arg Ala Thr IIe Thr Gly Tyr Arg

I	l e	Arg	His	His	Pro	Glu	His	Phe	Ser	Gly	Arg	Pro	Arg	Glu	Asp
					125					130					135
A	rg	Val	Pro	His	Ser	Arg	Asn	Ser	IIe.	Thr	Leu	Thr	Asn	Leu	Thr
					140					145					150
P	ro	Gly	Thr	Glü	Tyr	Val	Val	Ser	i i e	V a I	Ala	Leu	Asn	Gly	Arg
					155					160					165
G	lu	Glu	Ser	Pro	Leu	Leu	lle	Gly	GIn	Gln	Ser	Thr	Val	Ser	Asp
					170					175					180
٧	al	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr	Ser	Leu
	•				185					190					195
L	eu	l l e	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	V a I	Arg	Tyr	Tyr	Arg
					200					205					210
I	l e	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gln	Glu	Phe
					215					220					225
T	hr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	He	Ser	Gly	Leu	Lys
					230					235					240
P	ro	Gly	Val	Asp	Tyr	Thr	i l e	Thr	Val	Tyr	Ala	Val	Thr	Gly	Arg
					245				-	250					255
G	lу	Asp	Ser	Pro	Ala	Ser	Ser	Lys	Pro	He	Ser	I I e	Asn	Tyr	Arg
					260	•				265					270
T	hr	Glu	He	Asp	Lys	Pro	Ser	Met	Asn	Val	Ser	Pro	Pro	Arg	Arg
					275					280					285
A	la	Arg	Val	Thr	Asp	Ala	Thr	Glu	Thr	Thr	He	Thr	Цe	Ser	Trp
					290				•	295					300
A	rg	Thr	Lys	Thr	Glu	Thr	lle	Thr	Gly	Phe	Gln	Val	Asp	Ala	Val
•					305					310					315

Pro	Ala	Asn	Gly	GIn	Thr	Pro	lle	GIn	Arg	Thr	He	Lys	Pro	Asp
				320					325					330
Val	Arg	Ser	Tyr	Thr	He	Thr	Gİy	Leu	GIn	Pro	Gly	Thr	Asp	Tyr
				335					340					345
Lys	He	Tyr	Leu	Tyr	.Thr	Leu	Asn	Asp	Asn	Ala	Arg	Ser	Ser	Pro
				350					355					360
Val	V a I	He	Asp	Ala	Ser	Thr	Ala	lle	Asp	Ala	Pro	Ser	Asn	Leu
		•		365					370		•			375
Arg	Phe	Leu	Ala	Thr	Thr	Pro	Asn	Ser	Leu	Leu	Val	Ser	Trp	Gln
				380					385					390
Pro	Pro	Arg	Ala	Arg	He	Thr	Gly	Tyr	lle	He	Lys	Tyr	Glu	Lys
				395					400					405
Pro	Gly	Ser	Pro	Pro	Arg	Glu	Val	Val	Pro	Arg	Pro	Arg	Pro	Gly
				410					415					420
Val	Thr	Glu	Ala	Thr	lle	Thr	Gly	Leu	Glu	Pro	Gly	Thr	Glu	Tyr
		•		425					430					435
Thr	lle	Tyr	Val	Пe	Ala	Leu	Lys	Asn	Asn	Gln	Lys	Ser	Glu	Pro
				440					445					450
Leu	lle	Gly	Arg	Lys	Lys	Thr						•		
				455										

<210> 19

<211> 459

<212> PRT

<213> Artificial Sequence

<220>

<223> fibronectin fragment named CHV-181

<400> 19

Pro Thr Asp Leu Arg Phe Thr Asn Ile Gly Pro Asp Thr Met Arg 10 Val Thr Trp Ala Pro Pro Pro Ser IIe Asp Leu Thr Asn Phe Leu 25 Val Arg Tyr Ser Pro Val Lys Asn Glu Glu Asp Val Ala Glu Leu 35 40 Ser lie Ser Pro Ser Asp Asn Ala Val Leu Thr Asn Leu Leu Pro Gly Thr Glu Tyr Val Val Ser Val Ser Ser Val Tyr Glu Gln 70 His Glu Ser Thr Pro Leu Arg Gly Arg Gln Lys Thr Gly Leu Asp 80 85 .. Ser Pro Thr Gly lie Asp Phe Ser Asp Ile Thr Ala Asn Ser Phe 95 100 Thr Val His Trp lle Ala Pro Arg Ala Thr lie Thr Gly Tyr Arg 110 115 lle Arg His His Pro Glu His Phe Ser Gly Arg Pro Arg Glu Asp 125 130 135 Arg Val Pro His Ser Arg Asn Ser Ile Thr Leu Thr Asn Leu Thr 140 145 150 Pro Gly Thr Glu Tyr Val Val Ser Ile Val Ala Leu Asn Gly Arg

				155					160					165
Glu	Glu	Ser	Pro	Leu	Leu	He	Gly	GIn	Gln	Ser	Thr	V a I	Ser	Asp
				170			٠		175					180
Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr	Pro	Thr	Ser	Leu
				1.85		•	•		190					195
Leu	lle	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	V a I	Arg	Tyr	Tyr	Arg
				200					205					210
He	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gin	Glu	Phe
				215					220					225
Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	He	Ser	Gly	Leu	
٠				230					235					240
Pro	Gly	Val	Asp		Thr	lle	Thr	Vai		Ala	Vai	Thr	Gly	
				245					250					255
Giy	Asp	Ser	Pro		Ser	Ser	Lys	Pro		Ser	lle	Asn	Tyr	
	•	.		260					265					270
Thr	Glu	He	Asp		Pro	Ser	Met	Ala		Pro	Ala	Pro	Thr	
_				275			_	 .	280		_			285
Leu	Lys	Phe	Thr		Val	Thr	Pro	Inr		Leu	Ser	Ala	Gin	_
TL	D 4 =	D	•	290	C1 =		Th	C1	295 Tu -	A	V. I	.	Val	300
ınr	·	Pro	ASII	305	GIA	Leu	1 11 1	GIY	310	MIR	Vai	AIR	vai	315
Dro	Lue	C1	lve		Glv	Pro	Mat	lve		116	Aen	Lau	Ala	
FIU	Lys	G I U	Lys	320	u i y	, , ,	me t	Lys	325	116	7311	Leu	nia	330
Acn	Sar	Ser	Ser		Val	Val	Ser	GIV.		Met	Val	Ala	Thr	
nuy	VGI	551		335				- .,.	340					345
Tvr	Glu	Val	Ser		Tyr	Ala	Leu	Lys		Thr	Leu	Thr	Ser	

350 360 355 Pro Ala Gin Giy Val Val Thr Thr Leu Giu Asn Val Ser Pro Pro Arg Arg Ala Arg Val Thr Asp Ala Thr Glu Thr Thr Ile Thr Ile 385 Ser Trp Arg Thr Lys Thr Glu Thr Ile Thr Gly Phe Gln Val Asp 400 405 Ala Val Pro Ala Asn Gly Gln Thr Pro Ile Gln Arg Thr Ile Lys 410 415 Pro Asp Val Arg Ser Tyr Thr lie Thr Gly Leu Gln Pro Gly Thr Asp Tyr Lys Ile Tyr Leu Tyr Thr Leu Asn Asp Asn Ala Arg Ser 445 450 Ser Pro Val Val lle Asp Ala Ser Thr 455

<210> 20

<211> 276

<212> PRT

<213> Artificial Sequence

<220>

<223> fibronectin fragment named H-275-Cys

<400> 20

Me t	Ala	Ala	Ser	Ala	lle	Pro	Ala	Pro	Thr	Asp	Leu	Lys	Phe	Thr
1				5		-			10					15
Gin	Val	Thr	Pro	Thr	Ser	Leu	Ser	Ala	Gin	Trp	Thr	Pro	Pro	Asn
				20					25					30
Val	Gln	Leu	Thr	Gly	Tyr	Arg	Val	Arg	Val	Thr	Pro	Lys	Glu	Lys
				35					40					45
Thr	Gly	Pro	Met	Lys	Glu	lle	Asn	Leu	Ala	Pro	Asp	Ser	Ser	Ser
				50					55					60
Val	Val	Val	Ser	Gly	Leu	Met	Val	Ala	Thr	Lys	Tyr	Glu	Val	Ser
				65					70					: 75
Vai	Tyr	Ala	Leu	Lys	Asp	Thr	Leu	Thr	Ser	Arg	Pro	Ala	Gln	Gly
	•			80					85					90
V a I	Val	Thr	Thr	Leu	Glu	Asn	Val	Ser	Pro	Pro	Arg	Arg	Ala	Arg
				95					100					105
Val	Thr	Asp	Ala	Thr	Glu	Thr	Thr	i i e	Thr	lle	Ser	Trp	Arg	Thr
	•			110					115			•		120
Lys	Thr	Glu	Thr	lle	Thr	Gly	Phe	Gln	Val	Asp	Ala	Val	Pro	Ala
				125					130					135
Asn	Gly	GIn	Thr	Pro	He	Gin	Arg	Thr	lle	Lys	Pro	Asp	Val	Arg
				140					145					150
Ser	Tyr	Thr	1 l e	Thr	Gly	Leu	Gln	Pro	Gly	Thr	Asp	Tyr	Lys	lle
				155					160					165
Tyr	Leu	Tyr	Thr	Leu	Asn	Asp.	Asn	Ala	Arg	Ser	Ser	Pro	Val	Val
				170					175					180
lle	Asp	Ala	Ser	Thr	Ala	lle	Asp	Aia	Pro	Ser	Asn	Leu	Arg	Phe
				185					190					195

Leu Ala Thr Thr Pro Asn Ser Leu Leu Val Ser Trp Gin Pro Pro 200 Arg Ala Arg lie Thr Gly Tyr lie lie Lys Tyr Glu Lys Pro Gly Ser Pro Pro Arg Glu Val Val Pro Arg Pro Arg Pro Gly Val Thr 235 240 230 Glu Ala Thr ile Thr Gly Leu Glu Pro Gly Thr Glu Tyr Thr ile 245 250 255 Tyr Val lie Ala Leu Lys Asn Asn Gin Lys Ser Giu Pro Leu lie 260 265 270 Gly Arg Lys Lys Thr Cys

<210> 21

(211) 38

<212> DNA

<213> Artificial Sequence

275

(220)

<223> primer 12S

<400> 21

aaaccatggc agctagcgct attcctgcac caactgac

38

<210> 22

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> primer 14A

<400> 22

aaaggatccc taactagtct ttttccttcc aatcag

36

<210> 23

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> primer Cys-A

<400> 23

aaaagcggcc gctagcgcaa gccatggtct gtttcctgtg

40

<210> 24

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> primer Cys-S

<400> 24

aaaagcggcc gcactagtgc atagggatcc ggctgagcaa c

41

<210> 25

<211> 658

<212> PRT

<213> Artificial Sequence -

(220)

<223> fibronectin fragment named CH-296Na

<400> 25

1

Met Pro Thr Asp Leu Arg Phe Thr Asn Ile Gly Pro Asp Thr Met Arg

5

10

15

Val Thr Trp Ala Pro Pro Pro Ser IIe Asp Leu Thr Asn Phe Leu Val

20

. 25

30

Arg Tyr Ser Pro Vai Lys Asn Glu Glu. Asp Val Ala Glu Leu Ser Ile

3 5

40

45

Ser Pro Ser Asp Asn Ala Val Val Leu Thr Asn Leu Leu Pro Gly Thr

	50					55					60				
Glu	Tyr	Val	Val	Ser	Val	Ser	Ser	Val	Tyr	Glu	GIn	His	Glu	Ser	Thr
65					70					7,5					80
Pro	Leu	Arg	Giy	Arg	Gln	Lys	Thr	Gly	Leu	Asp	Ser	Pro	Thr	Gly	lle
				85					90					95	
Asp	Phe	Ser	Asp	lle	Thr	Ala	Asn	Ser	Phe	Thr	Val	His	Trp	lle	Ala
	_		100					105					110		
Pro	Arg	Ala	Thr	lle	Thr	Gly	Tyr	Arg	He	Arg	His	His	Pro	G I u	His
		115					120					125			
Phe	Ser	Gly	Arg	Pro	Arg	Glu	Asp	Arg	Val	Pro	His	Ser	Arg	Asn	Ser
	130					135	. *				140				
ile	Thr	Leu	Thr	Asn	Leu	Thr	Pro	Gly	Thr	Glu	Tyr	Val	Val	Ser	lle
145					150					155					160
V a·I	Ala	Leu	Asn	Gly	Arg	Glu	Glu	Ser	Pro	Leu	Leu	He	Gly	Gin	Gln
				165					170					175	
Ser	Thr	Val	Ser	Asp	Val	Pro	Arg	Asp	Leu	Glu	Val	Val	Ala	Ala	Thr
			180					185					190		
Pro	Thr	Ser	Leu	Leu	He	Ser	Trp	Asp	Ala	Pro	Ala	Val	Thr	Val	Arg
		195					200					205			
Tyr	Tyr	Arg	He	Thr	Tyr	Gly	Glu	Thr	Gly	Gly	Asn	Ser	Pro	Val	Gin
	210	-				215					220				
Glu	Phe	Thr	Val	Pro	Gly	Ser	Lys	Ser	Thr	Ala	Thr	l I e	Ser	Gly	Leu
225		•			230					235					240
Lys	Pro	Gly	Val	Asp	Tyr	Thr	lle	Thr	Val	Tyr	Ala	Val	Thr	Gly	Arg
				245					250					255	
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